

## Nu-Metrics Traffic Analyzer Study

### Computer Generated Summary Report

City: City of Fairfax

Street: Dwight Ave. #8 Red

A study of vehicle traffic was conducted with HI-STAR unit number 1045. The study was done in the West Bound lane on Dwight Ave. using counter #8 Red as shown on attached drawing. The counter was placed 162 Ft. from Orchard Dr. The study began on 12/02/2003 at 12:00 PM and concluded on 12/05/2003 at 09:00 AM, lasting a total of 69 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 987 vehicles passed through the location with a peak volume of 35 on 12/03/2003 at 04:00 PM and a minimum volume of 0 on 12/04/2003 at 01:00 AM. The AADT Count for this study was 499.

#### **SPEED**

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

| Chart 1 |          |          |          |          |          |          |          |          |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 to 9  | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 |
| 0       | 19       | 232      | 334      | 199      | 52       | 9        | 7        | 4        |

At least half of the vehicles were traveling in the 20 - 24 mph range or a lower speed. The average speed for all classified vehicles was 23 mph with 32.9 percent exceeding the posted speed of 25 mph. The HI-STAR found 4.13 percent of the total vehicles were traveling in excess of 35 mph. The mode speed for this traffic study was 20 mph and the 85th percentile was 28.92 mph.

#### **CLASSIFICATION**

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

| Chart 2 |          |          |          |          |          |          |      |
|---------|----------|----------|----------|----------|----------|----------|------|
| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
| 838     | 21       | 9        | 2        | 1        | 1        | 0        | 0    |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 859 which represents 98.50 percent of the total classified vehicles. The number of Small Trucks in the study was 9 which represents 1.00 percent of the total classified vehicles. The number of Trucks/Buses in the study was 2 which represents 0.20 percent of the total classified vehicles. The number of Tractor Trailers in the study was 2 which represents 0.20 percent of the total classified vehicles.

#### **HEADWAY**

During the peak time period, on 12/05/2003 at 09:00 AM the average headway between the vehicles was 8.13 seconds. The slowest traffic period was on 12/04/2003 at 01:00 AM. During this slowest period, the average headway was 3600.0 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 33 and 70 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.